**Sequence for the Progression of Math Learning Activities**

1. **Big Picture/Context**

The teacher provides the big picture or context for learning the new concept by answering the questions, “What are we learning?” and “Why is this important?” *Examples:* Pose a problem or question where students must use the new concept; provide a real-life context for the concept (i.e. newspaper/magazine article, television, video, song, etc.); use children’s literature to provide a context for the learning.

*Non-examples***:** “We are learning this because it’s going to be on the CRCT or EOCT.” or “Learn this because I said so.”

1. **Sense Making Experiences**

The teacher provides engaging activities where students are allowed to make sense of the mathematics they are learning through activities that engage them in the [Standards for Mathematical Practice](http://www.insidemathematics.org/index.php/commmon-core-math-intro). Reflection on these experiences is critical for students to be able to translate these experiences into understanding.

*Examples:* performance tasks; hands-on activities; [concrete-pictorial-abstract](http://www.loganschools.org/mathframework/CPA.pdf) (CPA) approach; [concept attainment](http://olc.spsd.sk.ca/DE/PD/instr/strats/cattain/index.html); technology; manipulatives; [interactive software and applets](http://nlvm.usu.edu/), etc.

*Non-examples:* textbook assignments and worksheets

1. **Skills Practice**

Once students have an understanding of what they are learning and why it is important, teachers should provide many opportunities for students to practice skills to mastery in engaging ways.

*Examples:* [Numbered Heads Together](http://www.eazhull.org.uk/nlc/numbered_heads.htm), [Inside-Outside Circle](http://www.usd416.org/pages/uploaded_files/Inside_Outside_Circle.pdf), [Boss-Secretary](http://www.google.com/url?sa=t&rct=j&q=boss%20secretary%20kagan&source=web&cd=3&ved=0CFMQFjAC&url=http%3A%2F%2Fwww.intentionaldesignacademy.com%2Fuploads%2F8%2F1%2F1%2F7%2F8117177%2Fbosssecretary.doc&ei=N74WUJyWOIjS9ATQrYD4Dw&usg=AFQjCNG9spdh3oP1rs_jyzXq-YStJMXBKA&sig2=i0UX8RrpEXETv-vQcoyvbQ), [Rally Coach](http://www.usd416.org/pages/uploaded_files/Rally_Coach.pdf), [Bingo](http://www.forsythcountyschools.org/its/kadkins/bingo.htm), [Jeopardy](http://www.gradeamathhelp.com/math-jeopardy.html), Math Practice Board Game, math stations, worked examples, etc.

*Non-examples:* Worksheet or textbook problems assigned for homework that students do not understand

1. **Reinforcement Practice**

Once students have mastered a skill, the teacher provides distributed practice of this skill so that new learning is not forgotten. Distributed practice should also provide opportunities for students to apply previously mastered skills in new contexts.

*Examples:* Five-minute Bell Ringer; textbook skills review section; homework on previous topics; math stations/centers; review games (I Have … Who Has …), etc.

*Non-examples***:** Worksheets where all the problems are alike and do not require students to differentiate between skills; quizzes and tests (students should have opportunities to practices skills in many different contexts before they are evaluated on them)

*Depending on the complexity of the math concept and individual student characteristics, progression through this sequence may happen over a period of days or weeks. However, students should experience an opening, work period, and closing during each day of instruction.*